AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended): An optical space transmission device for one to plural bi-directional optical communications, ~~including~~ comprising:

transmission result detection means for determining, subsequent to a polling sequence, if a communication transmission to an associated office is performed successfully by detecting if a command of a predetermined content is returned from the associated office in response to data transmitted thereto at a predetermined luminous intensity; and

luminous intensity adjusting means for adjusting a subsequent luminous intensity based on a result of detection by said transmission result detection means.

2. (original): The optical space transmission device as set forth in claim 1, wherein:

said transmission result detection means determines if the command is returned based on a ratio of receiving error of the command.

3. (original): The optical space transmission device as set forth in claim 1, wherein:

said luminous intensity adjusting means is capable of adjusting the luminous intensity at multiple levels in such a manner that a luminous intensity is maximized at a time of starting

transmission, and as long as the transmission result detection means detects that a transmission is performed successfully, the luminous intensity is reduced by one level, while if the transmission result detection means detects that a transmission is not performed successfully, the luminous intensity is increased by one level, thereby determining a minimum required luminous intensity.

4. (original): The optical space transmission device as set forth in claim 1, wherein:

the luminous intensity adjusting means adjusts the luminous intensity by increasing or decreasing the drive current of a light emitting element.

5. (currently amended): The optical space transmission device as set forth in claim 1, wherein:

said optical space transmission device can be ~~used~~ realized both as a host device and a peripheral device.

6. (original): The optical space transmission device as set forth in claim 1, wherein:

only in its application to a peripheral device with respect to a host device for said optical transmission, said transmission result detection means and said luminous intensity adjusting means are provided.

7. (new): The optical space transmission device as set forth in claim 1, wherein:

said transmission result detection means determines if the

detected command is returned based on a wait time for the return command.

8. (new) The optical space transmission device as set forth in claim 1, wherein:

said luminous intensity adjusting means adjusts a luminous intensity downward if the detected command is a predetermined content and adjusts the luminous intensity upward if the detected command is not of a predetermined content.

9. (new) The optical space transmission device as set forth in claim 8, wherein:

said luminous intensity adjusting means adjusts a luminous intensity subsequent to the polling sequence.

10. (new): A method for providing bi-directional optical communications in an optical space transmission device, comprising:

determining, subsequent to a polling sequence, if a communication transmission to an associated office is performed successfully by detecting if a command of a predetermined content is returned from the associated office in response to data transmitted thereto at a predetermined luminous intensity; and

adjusting a subsequent luminous intensity based on a result of detecting.

11. (new): The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said detecting of said command of a predetermined content is based on a ratio of receiving error of the command.

12. (new): The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting of the subsequent luminous intensity is done at multiple levels in such a manner that the luminous intensity is maximized at a time of starting transmission, and as long as detecting detects that a transmission is performed successfully, the luminous intensity is reduced by one level, while if detecting detects that a transmission is not performed successfully, the luminous intensity is increased by one level, thereby determining a minimum required luminous intensity.

13. (new): The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting adjusts the luminous intensity by increasing or decreasing a drive current of a light emitting element.

14. (new): The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said optical space transmission method can be performed both in a host device and a peripheral device.

15. (new): The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

in its application to a peripheral device with respect to a host device for said optical transmission, said detecting and said luminous intensity adjusting are only provided in the peripheral device.

16. (new): The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said detecting determines if the detected command is returned based on a wait time for the return command.

17. (new) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting adjusts a luminous intensity downward if the detected command is a predetermined content and adjusts the luminous intensity upward if the detected command is not of a predetermined content.

18. (new) The method for providing bi-directional optical communications in an optical space transmission device as set forth in claim 10, wherein:

said adjusting adjusts a luminous intensity subsequent to the polling sequence.

19. (new): An optical space transmission device for one to plural bi-directional optical communications, comprising:

a receiving error detecting circuit, the receiving error detecting circuit determines, subsequent to a polling sequence, if a transmission to an associated office is performed successfully by detecting if a command of a predetermined content is returned from the associated office in response to data transmitted thereto at a predetermined luminous intensity; and

a control section, the control section adjusts a subsequent luminous intensity based on a result of detection by said receiving error detecting circuit.